What is claimed is:

1. A high performance stator device comprising:

a stator portion being provided to various stator coils to be installed in stator grooves; wherein the stator groove having a proper larger space for receiving windings of stator coil with more winding numbers;

a plurality of stator coils including a plurality of stator coils with various numbers of windings; the coils being overlapped or adjacent arranged to be placed in the same stator portion, each of the coils being opened to other coil; each of a wire head and wire tail of each of the stator coils being connected to a switches so as to be formed with a Y type three phases connection.

a plurality of switches each having an input end controlled by a management control unit of a control system through the output point; the control joints of the plurality of switches being connected to the wire heads and wire tails of the stator coils; and

the control system having a management control unit therein which sets the switching forms of switches; the management control unit managing all the switching forms of the switches; after switching the switches, the coils of the stator portion being connected in series to be formed with different connections or selectively switching to any one of the coils so as to be formed with various networks of the coils with different numbers of windings; a coil winding network with various numbers of windings being formed in the stator portion through the control of the management control unit of the control system, i.e., in the network,

various inverse electromotive force K_E and twisting force constant K_T.

2. The high performance stator device as claimed in claim 1, wherein there are at least three coils, and each of the coils have the same or different numbers of windings; through management control unit of the control system, the switches are switched to one of the coils or the plurality of coils are partially or wholly connected in series to be formed as a winding network; numbers of windings are varied in any forms; the inverse electromotive force K_E and twisting force constant K_T are varied in different ways.

3. The high performance stator device as claimed in claim 1, wherein there are at least two coils, and each of the coils have the same or different numbers of windings; through management control unit of the control system, the switches are switched to one of the coils or the plurality of coils are partially or wholly connected in series to be formed as a winding network; numbers of windings are varied in any forms; the inverse electromotive force K_E and twisting force constant K_T are varied in different ways.

4. The high performance stator device as claimed in claim 1, wherein change of the management control unit of the control system is simulated by the inverse electromotive force K_E and twisting force constant K_T in advance to calculate various preferred operation area; an operation speed rmp value in a preferred operation area being used as a reference; the rotary speed sensor is used to detect operation rotary speed signals which are inputted to the control system for being switched by the switches as to change orders.

5. The high performance stator device as claimed in claim 1, wherein change of the management control unit of the control system is simulated by the inverse electromotive force KE and twisting force constant KT in advance to calculate various preferred operation area; an operation current value in a preferred operation area is used as a reference; a rotary speed sensor is used to detect operation current signals which is inputted to the control system for being switched by the switches as to change orders.

6. The high performance stator device as claimed in claim 1, wherein change of the management control unit of the control system is controlled manually; in this process, control signals are manually inputted through the control signal input end to the control system; the management control unit of the control system cause a switch signal output end to output the form of the input signal according to the form of the input signal from the control signal input end so that the switches are switched to a winding network with respect to require number of windings.

7. The high performance stator device as claimed in claim 1, wherein numbers of windings of the coils in the stator portion, inverse electromotive force K_E, twisting force constant K_T can be varied in various forms, thereby, in the lower, middle and high operation speed ranges of an electromotive machine or generators, the operational efficiencies in the whole areas are improved uniformly, thereby having a high EFF value.

8. The high performance stator device as claimed in claim 1, wherein

numbers of windings of the coils in the stator portion are varied in various forms, and thus the electromotive machine causes the numbers of windings of the coils, twisting force constant K_T and inverse electromotive force K_E are be various in low and middle operational speed with respect to the requirement of the output twisting force of the electromotive machine; therefore, an output twisting force of the electromotive machine is improved properly.

9. The high performance stator device as claimed in claim 1, wherein numbers of windings, wire diameters, and winding ways of the stator coils are changed with changes of manufacturing methods.

10. The high performance stator device as claimed in claim 1, wherein the switch is a relay with joints for switching the coils of the stator portion.

11. The high performance stator device as claimed in claim 1, wherein the switch is a jointless semiconductor device for switching the coils of the stator portion.

12. The high performance stator device as claimed in claim 1, wherein the stator coils has a three phases Y coil winding type for being changed and managed by the control system.

13. The high performance stator device as claimed in claim 1, wherein the stator coils has a three phases Δ coil winding type for being changed and managed by the control system.

14. The high performance stator device as claimed in claim 1, wherein the stator coils has a single phases coil winding type for being changed and managed by the control system.